

ITEM: 7

SUBJECT: City of Merced, Wastewater Treatment Facility, Merced County – *Consideration of NPDES Permit Renewal and Cease and Desist Order*

DISCUSSION: The City of Merced owns and operates a 10-mgd capacity WWTF and discharges about 75 to 80 percent of the WWTF effluent flow to Hartley Slough, tributary to the San Joaquin River, a water of the United States, under the terms and conditions of WDRs Order No. 94-167 (NPDES Permit No. CA0079219). The City discharges the remaining 20 to 25 percent of the WWTF effluent to its Wildlife Management Area (WMA) immediately south of the WWTF. The discharge to Hartley Slough occurs immediately upstream from its confluence with two surface water drainages. The City monitors Hartley Slough upstream from the discharge point, and downstream receiving water quality immediately upstream of an impoundment of all three surface water drainages. The City's current protocol for monitoring receiving surface water quality makes it extremely difficult to distinguish the impact of the City's discharge to Hartley Slough from the impact of Owens and Miles Creeks.

The proposed WDRs for NPDES Permit renewal carries forth almost all of the previous NPDES Permit's effluent and receiving water limitations, which have been updated as necessary to reflect current Board plans and policies, particularly the newly adopted California Toxics Rule. The proposed WDRs require the City to establish an additional upstream surface water

monitoring station and to move its downstream monitoring station closer to the discharge point. Additionally, the proposed WDRs prescribe a numerical effluent limitation for ammonia; prohibit the discharge to land of digester supernatant; and require the City to monitor groundwater quality in the WMA and beyond and, if necessary, implement measures to reduce groundwater degradation.

In May 2000, the City provided written comments to the proposed WDRs circulated on 14 April 2000. The City did not submit written comments to the revised version of the proposed WDRs circulated on 27 July 2000 by the 23 August deadline or by 2 October when this was prepared. Nevertheless, in mid-September the City told Board staff that it is contesting the proposed WDRs because the receiving surface water limitations for pH, prescribed by the Basin Plan, are difficult to meet for an effluent dominated water such as Hartley Slough. The City insists the Board has flexibility in setting receiving surface water limitations. Staff disagrees, but has informed the City that staff is willing to work with the City in a City-funded effort to perform a study to develop documentation for site-specific objectives that are protective of uses but more accommodating to the City's situation. This effort may lead to a Board-adopted Basin Plan amendment (BPA) that would allow the City to request that its Permit be reopened for Board consideration of relaxing its receiving surface water pH limitations.

The Discharger currently discharges supernatant from the anaerobic digestion of sludge to unlined sludge-

drying beds. The beneficial uses of groundwater include municipal and domestic supply. Groundwater monitoring data for the Discharger's industrial waste disposal site, south of the sludge-drying beds, indicates groundwater nitrate-nitrogen concentrations are below 10 mg/L, the maximum contaminant level for drinking water. While no data exists yet to characterize the quality of groundwater directly under the sludge-drying beds, discharge of digester supernatant waste to the sludge-drying beds is not best practicable treatment and control (BPTC) and has a reasonable potential for degrading groundwater quality.

The City is under enforcement for violations of Order No. 94-167 and threatens to violate the proposed WDRs. The City has complied with C&D Order No. 97-018, but the required actions have caused it to reach the WWTF operating capacity and to cause and threaten to cause other violations. The Board adopted C&D Order No. 98-219 that rescinded C&D Order No. 97-018 and imposed a new schedule for developing more capacity. Until capacity is increased, Order No. 98-219 limits the WWTF monthly average dry weather effluent flow to 7.7 mgd, unless the Discharger can demonstrate that a specific higher rate of effluent flow will not cause or threaten to cause violations of Order No. 94-167. In complying with C&D Order No. 98-219, the City submitted a plan to modify its WWTF that reflects the various project stages (e.g., financing, design, construction, and startup). The City's implementation schedule required more time than allowed by C&D Order No. 98-219. The Board adopted Special Order No. 99-136 to modify C&D Order No. 98-216 to extend

key completion deadlines by six to nine months.

The proposed C&D Order (1) rescinds C&D Order No. 98-216 and Special Order No. 99-136, (2) carries over the same implementation schedule as in Special Order No. 99-136 (from June 2000 on) and the same interim flow restriction as in C&D Order No. 98-216, and (3) refers to the terms and conditions of the proposed WDRs. Further, the proposed C&D Order requires the Discharger to implement BPTC for digester supernatant management, imposes a schedule to achieve compliance with the proposed WDRs, and requires the Discharger to either implement modifications to comply with receiving water limitations for pH or perform a scientific study that could serve as a BPA for specific surface water quality objectives for pH in the receiving water.

RECOMMENDATION:

- Adopt the proposed WDRs for NPDES Permit renewal
- Adopt the proposed Cease and Desist Order

Mgmt. Review

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Legal Review

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